

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Banerjee et al.**

Serial No.: **09/941,251**

Filed: **August 28, 2001**

For: **Method for Improved Administering  
of Tests Using Customized User Alerts**

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Group Art Unit: **3714**

Examiner: **Duffy, David W.**

Confirmation No.: **5907**

35525

PATENT TRADEMARK OFFICE  
CUSTOMER NUMBER

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**APPEAL BRIEF (37 C.F.R. 41.37)**

This brief is in furtherance of the Notice of Appeal, filed in this case on December 2, 2008.

A fee of \$540.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0447. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447.

**REAL PARTY IN INTEREST**

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

### **RELATED APPEALS AND INTERFERENCES**

This appeal has no related proceedings or interferences.

## **STATUS OF CLAIMS**

### **A. TOTAL NUMBER OF CLAIMS IN APPLICATION**

The claims in the application are: 1-51

### **B. STATUS OF ALL THE CLAIMS IN APPLICATION**

Claims canceled: 6, 8-11, 14, 16-20, 23-50

Claims withdrawn from consideration but not canceled: None

Claims pending: 1-5, 7, 12, 13, 15, 21, 22 and 51

Claims allowed: None

Claims rejected: 1-5, 7, 12, 13, 15, 21, 22 and 51

Claims objected to: None

### **C. CLAIMS ON APPEAL**

The claims on appeal are: 1-5, 7, 12, 13, 15, 21, 22 and 51

### **STATUS OF AMENDMENTS**

No amendment was filed after final rejection.

## **SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention provides a test apparatus, system, and method by which a student's testing progress can be monitored from a remote location in order to make sure that the student does not spend an inordinate amount of time on any one question during an examination. Moreover, the apparatus, system, and method provide for proctoring of an on-line test by a third party that is capable of proctoring the exam from a remote location, and providing time alert notification to the student during the examination in an effort to aid the student in being able to complete the exam in the allotted test taking period.

### **A. CLAIM 1 - INDEPENDENT**

The subject matter of claim 1 is directed to a computer-implemented method for monitoring responses to test questions presented in a data processing system {**Specification page 13, line 28 – page 14, line 21; page 19, lines 31-33; Figure 4, element 400**}. The method comprising the computer implemented steps of: identifying presentation of the test questions on the data processing system {**Specification page 20, lines 26-32; page 30, lines 16-20; Figure 10, element 1016**}; responsive to the presentation of the test questions on the data processing system, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a specific test question {**Specification page 22, lines 17-21**}; and generating a customized user alert after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the test taker to answer {**Specification page 22, lines 21-30**}, where the customized user alert apprises a test taker that the elapsed time is excessive for the specific test question {**Specification page 25, lines 20-27**}. The customized user alert is periodically presented to the test taker based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule {**Specification page 30, line 26 – page 31, line 9; Figure 6, elements 630 and 632; Figure 10, elements 1020 and 1028**}. The customized user alert includes an amount of time remaining to answer the specific test question {**Specification page 22, lines 13-15**}, a suggested amount of time to spend on the specific test question {**Specification page 14, lines 4-9**}, and an amount of time allotted to

complete all of the test questions {Specification page 13, line 29 – page 14, line 9}. The alert schedule is generated for the test taker based on a customized alert profile for the test taker {Specification page 29, lines 10-14; Figure 9, element 920}. The suggested amount of time to spend on the specific test question is calculated for the test taker based on the customized alert profile {Specification page 14, lines 4-9}. The customized alert profile includes previous performance information of the test taker {Specification page 27, lines 27-28; Figure 9, element 910}, information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question {Specification page 24, lines 2-8}, and at least one alert threshold for each of the test questions {Specification page 25, lines 20-27}.

## **B. CLAIM 51 - INDEPENDENT**

The subject matter of claim 51 is directed to a computer-implemented method for monitoring responses to test questions presented in a data processing system {Specification page 13, line 28 – page 14, line 21; page 19, lines 31-33; Figure 4, element 400}. The method comprising the steps of: administering, from an examination server, a plurality of tests to a plurality of remotely located users on a plurality of user devices {Specification page 8, lines 9-19; Figure 1, elements 104, 108, 111 and 114} and for each test of said plurality of tests that is administered: establishing a session identification for the administration of the test to the remotely located user, where the session identification includes a user identification, a test identifier, and a proctor device identifier {Specification page 15, line 25 – page 16, line 14; Figure 4, element 440}; identifying presentation of the test questions on a user device of said user devices {Specification page 20, lines 26-32; page 30, lines 16-20; Figure 10, element 1016}; responsive to the presentation of the test questions on said user device, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a specific test question {Specification page 22, lines 17-21}; correlating the test question timing data to the administration of the test to the remotely located user based on the session identification; where the test question timing data is output to said proctor device, based on said proctor device identifier {Specification page 16, lines 15-22}, in response to determining that evidence of greater than expected response time to the specific test question is present {Specification page 22, lines 21-30};

and generating a customized user alert message after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the remotely located user to answer {**Specification page 22, lines 21-30**}, where the customized user alert message apprises the remotely located user that the elapsed time is excessive for the specific test question {**Specification page 25, lines 20-27**}. The customized user alert message is periodically presented to the remotely located user based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule {**Specification page 30, line 26 – page 31, line 9; Figure 6, elements 630 and 632; Figure 10, elements 1020 and 1028**}. The customized user alert message includes an amount of time remaining to answer the specific test question {**Specification page 22, lines 13-15**}, a suggested amount of time to spend on the specific test question {**Specification page 14, lines 4-9**}, and an amount of time allotted to complete all of the test questions {**Specification page 13, line 29 – page 14, line 9**}. The alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user {**Specification page 29, lines 10-14; Figure 9, element 920**}. The suggested amount of time to spend on the specific test question is calculated for the remotely located user based on the customized alert profile {**Specification page 14, lines 4-9**}. The customized alert profile includes previous performance information of the remotely located user {**Specification page 27, lines 27-28; Figure 9, element 910**}, information to associate a level of difficulty of the specific test question with a capability category of the remotely located user to answer the specific test question {**Specification page 24, lines 2-8**}, and a plurality of alert thresholds for each of the test questions {**Specification page 25, lines 20-27**}. The remotely located user can send instant messages to and receive instant messages from said proctor device associated with said examination server and wherein said proctor device can send instant messages to and receive instant messages from the plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data for the remotely located user during the test {**Specification page 21, lines 23-31; Figure 5, element 520**}.

## **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to review on appeal are as follows:

### **A. GROUND OF REJECTION 1**

Rejection of Claims 1-3, 12, 21 and 22 under 35 U.S.C. § 103 as being unpatentable over Thomas (U.S. Patent No. 5,885,087);

### **B. GROUND OF REJECTION 2**

Rejection of Claims 4, 5, 7 and 13 under 35 U.S.C. § 103 as being unpatentable over Thomas (U.S. Patent No. 5,885,087) in view of Sugimoto (U.S. Patent No. 6,755,661) and further in view of admitted prior art;

### **C. GROUND OF REJECTION 3**

Rejection of Claim 15 under 35 U.S.C. § 103 as being unpatentable over Thomas (U.S. Patent No. 5,885,087) in view of Sugimoto (U.S. Patent No. 6,755,661) and further in view Kershaw et al. (U.S. Patent No. 5,827,070); and

### **D. GROUND OF REJECTION 4**

Rejection of Claim 51 under 35 U.S.C. § 103 as being unpatentable over Kershaw in view of Thomas (U.S. Patent No. 5,885,087), Hoehn-Saroc (U.S. Patent No. 5,915,973) and Sugimoto (U.S. Patent No. 6,755,661).

## ARGUMENT

The present invention provides a test apparatus, system, and method by which a student's testing progress can be monitored from a remote location in order to make sure that the student does not spend an inordinate amount of time on any one question during an examination. Moreover, the apparatus, system, and method provide for proctoring of an on-line test by a third party that is capable of proctoring the exam from a remote location, and providing time alert notification to the student during the examination in an effort to aid the student in being able to complete the exam in the allotted test taking period.

### **A. GROUND OF REJECTION 1 (Claims 1-3, 12, 21 and 22)**

Claims 1-3, 12, 21 and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Thomas (U.S. Patent No. 5,885,087), hereinafter "Thomas".

#### **1. Claims 1, 2, 12, 21 and 22**

With respect to Claim 1, such claim recites "wherein the customized user alert is periodically presented to the test taker based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule, wherein the customized user alert includes an amount of time remaining to answer the specific test question, a suggested amount of time to spend on the specific test question, and an amount of time allotted to complete all of the test questions". As can be seen, there is a customized user alert that is periodically presented to the user based on an alert schedule for the specific test question, and this customized user alert is presented to the test taker *after at least one time period indicated by the alert schedule*. In addition, per these features of Claim 1, this same customized user alert includes (1) an amount of time *remaining to answer the specific test question*, (2) a *suggested amount of time to spend on this specific test question*, and (3) an amount of time allotted to complete *all of the test questions*. None of the cited references teach or suggest such a customized user alert that includes all of these claimed features – nor has the Examiner alleged a teaching/suggestion of such a customized user alert having all of

these claimed features. Therefore, Claim 1 has been erroneously rejected<sup>1</sup> as the Examiner has failed to properly establish a prima facie showing of obviousness with respect to the claimed customized user alert that includes times pertaining to *both* the overall test *as well as* the particular question.<sup>2</sup>

Specifically with respect to the claimed customized user alert, the Examiner merely alleges that the Thomas describes that the time taken by a user to answer a question is (i) tracked, (ii) displayed, and (iii) compared to a predetermined time. This assertion does not establish any teaching or suggestion of the claimed customized user alert. In addressing the cited Sugimoto reference, the Examiner alleges that Sugimoto describes ‘a preset time limit for each question’. These are the only time-based teachings that are alleged to be taught by the cited references. Thus, the Examiner has failed to establish a teaching or suggestion of the specific time-based features pertaining to the customized user alert, including that the customized user alert is periodically presented to the test taker based on an alert schedule for the specific test question **after at least one time period** indicated by the alert schedule, *wherein the customized user alert includes* (1) an **amount of time remaining** to answer the specific test question, (2) a **suggested amount of time** to spend on the specific test question, and (3) an **amount of time allotted** to complete all of the test questions. Thus, it is urged that Claim 1 has been erroneously rejected due to this prima facie obviousness deficiency with respect to the three time parameters associated with the customized user alert that is periodically sent to the user.

In addition, Claim 1 includes detailed characteristics associated with a customized alert *profile* (as contrasted with the customized user *alert* previously described hereinabove). Claim 1 also recites “wherein the alert schedule is generated for the test taker based on a *customized alert*

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<sup>1</sup> If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

<sup>2</sup> In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. *Id.* **All words in a claim must be considered** in judging the patentability of that claim against the prior art.” MPEP 2143.03; *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970) (emphasis added by Applicants).

*profile* for the test taker, wherein the suggested amount of time to spend on the specific test question is calculated for the test taker based on the customized alert profile, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, and at least one alert threshold for each of the test questions”. As can be seen, this customized alert profile (that is used in generating the alert schedule that is used to send the customized user alerts that were previously described) includes (1) previous performance information of the test taker, (2) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, and (3) at least one alert threshold for each of the test questions. None of the cited references teach or suggest such a customized user profile.

In rejecting this aspect of Claim 1, the Examiner states that Thomas describes player profiles in order to provide a history of the user’s progress including performance by subject or topic. At a fundamental level, such Thomas player profile is not used in generating any type of alert schedule (that is used to present a customized user alert to a test taker), as is provided by the features of Claim 1. Further, such Thomas player profile does not include: (i) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, or (ii) at least one alert threshold for each of the test questions, as is provided by the features of Claim 1.

As to the teachings of Sugimoto and a profile, the Examiner merely alleges that Sugimoto describes test taker profiles that include ‘skill level of the user’, and that the profile is *used to determine questions that are presented to the test taker*. At a fundamental level, such Sugimoto profile is not used in generating any type of alert schedule (that is used to present a customized user alert to a test taker), as is provided by the features of Claim 1. Further, such Sugimoto profile does not include: (i) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, or (ii) at least one alert threshold for each of the test questions, as is provided by the features of Claim 1.

Thus, as neither cited reference describes (1) a user profile that includes: (i) information to associate a level of difficulty of the specific test question with a *capability category of the test taker* to answer the specific test question, or (ii) at least one alert threshold for *each* of the test questions;

or (2) a user profile that is used to generate an alert schedule (and this alert schedule is used to periodically present a customized user alert to a test taker, as previously described), it is further urged that Claim 1 has been erroneously rejected due to this prima facie obviousness deficiency with respect to the characteristics and use of the claimed customized alert profile.

In conclusion with respect to Claim 1, none of the cited references teach or suggest (1) the three different time parameters associated with the customized user alert that is periodically sent to the user (which advantageously facilitates providing the test taker with detailed time parameter information pertaining to various aspects of taking the test), (2) a user profile that includes: (i) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, or (ii) at least one alert threshold for each of the test questions; or (3) a user profile that is used to generate an alert schedule (and this alert schedule is advantageously used to periodically present a customized user alert to a test taker). Therefore, it is urged that Claim 1 has been erroneously rejected, and further that such claim is in condition for allowance.

## **2. Claim 3**

Applicants initially urge error in the rejection of Claim 3 for reasons given above with respect to Claim 1 (of which Claim 3 depends upon).

Further with respect to Claim 3, such claim recites “wherein the presentation of the test questions is based on levels of difficulty of the test questions and the capability category of the test taker to answer the test questions”. As can be seen, the presentation of the test questions is based on two criteria: (1) levels of difficulty of the test questions, and (2) the capability category of the test taker to answer the test questions. None of the cited references teach or suggest these two criteria, in combination, being used in the presentation of test questions. For example, Sugimoto describes a question database that stores questions, and this question database includes the number of solvers and the number of solvers who return the correct answer (Sugimoto col. 6, lines 3-5), and a skill category code (Sugimoto col. 6, line 6). Neither of these stored database items describe that the *presentation of the test questions* is based on levels of difficulty of the test questions and the capability category of the test taker to answer the test questions. Thus, it is further shown that Claim 3 has been erroneously rejected due to this additional prima facie obviousness deficiency.

**B. GROUND OF REJECTION 2 (Claims 4, 5, 7 and 13)**

Claims 4, 5, 7 and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Thomas in view of Sugimoto (U.S. Patent No. 6,755,661), hereinafter “Sugimoto” and further in view of admitted prior art.

**1. Claims 4, 5, 7 and 13**

Applicants urge error in the rejection of Claims 4, 5, 7 and 13 for similar reasons to those given above with respect to Claim 1 (of which Claims 4, 5, 7 and 13 depend upon), as the newly cited reference to Sugimoto and the alleged admitted prior art do not overcome the teaching/suggestion deficiencies identified hereinabove with respect to such claims.

Therefore, the rejection of Claims 4, 5, 7 and 13 under 35 U.S.C. § 103 has been overcome.

**C. GROUND OF REJECTION 3 (Claim 15)**

Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Thomas in view of Sugimoto and further in view Kershaw et al. (U.S. Patent No. 5,827,070), hereinafter “Kershaw”.

**1. Claim 15**

Applicants initially urge error in the rejection of Claim 15 for similar reasons to those given above with respect to Claim 1 (of which Claim 15 depends upon), as the newly cited reference to Kershaw does not overcome the teaching/suggestion deficiencies identified hereinabove.

Applicants further urge error in the rejection of Claim 15 by showing that none of the cited references teach or suggest the claimed feature of “wherein a session identification is established for the presentation of the test questions by a proctor device and includes a proctor device identifier, and wherein outputting the test question timing data to the proctor device is based on the proctor device identifier”. Specifically, none of the cited references teach or suggest (1) a proctor device that establishes a session identification for presentation of test questions, or (2) the outputting of test question timing data to such proctor device based on a proctor device identifier. In rejecting Claim 15, the Examiner merely alleges that Kershaw (i) discloses the collection of statistical data on all test takers (which does not establish a teaching of the claimed proctor device characteristics (1) and (2) identified above), and (ii) recording of a test program id, registration id, test center id, and

workstation id for each tester (which does not establish a teaching of the claimed proctor device characteristics (1) and (2) identified above). Thus, it is further shown that Claim 15 has been erroneously rejected due to this additional prima facie obviousness deficiency with respect to the proctor device and its associated characteristics.

#### **D. GROUND OF REJECTION 4 (Claim 51)**

Claim 51 stands rejected under 35 U.S.C. § 103 as being unpatentable over Kershaw in view of Thomas (U.S. Patent No. 5,885,087), Hoehn-Saroc (U.S. Patent No. 5,915,973) and Sugimoto (U.S. Patent No. 6,755,661).

##### **1. Claim 51**

With respect to Claim 51, such claim recites “wherein the test question timing data is output to said proctor device, based on said proctor device identifier, in response to determining that evidence of greater than expected response time to the specific test question is present” and “wherein the remotely located user can send instant messages to and receive instant messages from said proctor device associated with said examination server and wherein said proctor device can send instant messages to and receive instant messages from the plurality of remotely located users”. None of the cited references teach or suggest – nor has the Examiner alleged any teaching or suggestion of – such *test question timing data being output to a proctor device*, where such proctor device facilitates instant messaging communication with a plurality of remotely located users. Thus, Claim 51 has been erroneously rejected as the Examiner has failed to establish a prima facie showing of obviousness with respect to Claim 51.

Further with respect to Claim 51, such claim recites “generating a customized user alert message after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the remotely located user to answer, wherein the customized user alert message apprises the remotely located user that the elapsed time is excessive for the specific test question, wherein the customized user alert message is periodically presented to the remotely located user based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule, wherein the customized user alert message includes an amount of time remaining to answer the specific test question, a suggested amount of time to spend on the

specific test question, and an amount of time allotted to complete all of the test questions”. As can be seen, there is a *customized user alert that is generated after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the remotely located user to answer*. In addition, per these features of Claim 51, this same customized user alert message (1) apprises the remotely located user that the elapsed time is excessive for the specific test question, (2) is periodically presented to the remotely located user based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule, and (3) includes (i) an amount of time remaining to answer the specific test question, (ii) a suggested amount of time to spend on the specific test question, and (iii) an amount of time allotted to complete all of the test questions. None of the cited references teach or suggest such a customized user alert that includes all of these claimed features – nor has the Examiner alleged a teaching/suggestion of such a customized user alert message having all of these claimed features. Therefore, Claim 51 has been erroneously rejected as the Examiner has failed to properly establish a prima facie showing of obviousness.

In addition, Claim 51 includes details characteristics associated with a customized alert *profile* (as contrasted with the customized user *alert* previously described hereinabove). Claim 51 also recites “wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, wherein the suggested amount of time to spend on the specific test question is calculated for the remotely located user based on the customized alert profile, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of the specific test question with a capability category of the remotely located user to answer the specific test question, and a plurality of alert thresholds for each of the test questions”. As can be seen, this customized alert profile (that is used in generating the alert schedule that is used to present the customized user alert messages to a user, as previously described) includes (1) previous performance information of the test taker, (2) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, and (3) a plurality of alert thresholds for each of the test questions. None of the cited references teach or suggest such a customized alert profile.

In rejecting this aspect of Claim 51, the Examiner alleges that Sugimoto describes test taker profiles that include ‘skill level of the user’, and that the profile is used to determine questions that are presented to the test taker. At a fundamental level, such Sugimoto profile is not used in generating any type of alert schedule (that is used to present the customized user alert messages to a user, as previously described), as is provided by the features of Claim 51. Further, such Sugimoto profile does not include: (i) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, or (ii) at least one alert threshold for each of the test questions, as is provided by the features of Claim 1.

Thus, as none of the cited references describes (1) timing data being output to a proctor device, where such proctor device facilitates instant messaging communication with a plurality of remotely located users, (2) a user profile that includes: (i) information to associate a level of difficulty of the specific test question with a capability category of the test taker to answer the specific test question, or (ii) at least one alert threshold for each of the test questions; or (3) a user profile that is used to generate an alert schedule (and this alert schedule is used to periodically present a customized user alert to a test taker, as previously described), it is urged that Claim 51 has been erroneously rejected due to this prima facie obviousness deficiency.

Therefore, the rejection of Claim 51 under 35 U.S.C. § 103 has been overcome.

## **E. CONCLUSION**

As shown above, the Examiner has failed to state valid rejections against any of the claims. Therefore, Appellants request that the Board of Patent Appeals and Interferences reverse the rejections. Additionally, Appellants request that the Board direct the Examiner to allow the claims.

Date: January 30, 2009

Respectfully submitted,

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## **CLAIMS APPENDIX**

The text of the claims involved in the appeal is as follows:

1. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the computer implemented steps of:
  - identifying presentation of the test questions on the data processing system;
  - responsive to the presentation of the test questions on the data processing system, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a specific test question; and
  - generating a customized user alert after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the test taker to answer, wherein the customized user alert apprises a test taker that the elapsed time is excessive for the specific test question, wherein the customized user alert is periodically presented to the test taker based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule, wherein the customized user alert includes an amount of time remaining to answer the specific test question, a suggested amount of time to spend on the specific test question, and an amount of time allotted to complete all of the test questions, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, wherein the suggested amount of time to spend on the specific test question is calculated for the test taker based on the customized alert profile, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty

of the specific test question with a capability category of the test taker to answer the specific test question, and at least one alert threshold for each of the test questions.

2. The computer-implemented method of claim 1, wherein the monitoring step is performed by a proctor device or a program on the data processing system.

3. The computer-implemented method of claim 1, wherein the presentation of the test questions is based on levels of difficulty of the test questions and the capability category of the test taker to answer the test questions.

4. The computer-implemented method of claim 1 further comprising:  
billing a client for monitoring the presentation of the test questions.

5. The computer-implemented method of claim 1, wherein the test questions are part of a test and further comprising:

storing an identification of a number of test takers for the test; and

billing a client based on the number of test takers for the test.

7. The computer-implemented method of claim 1, further comprising:  
billing a test developer for monitoring the presentation of the test questions.

12. The computer-implemented method of claim 1, further comprising:  
storing a score for the test questions in a permanent storage.

13. The computer-implemented method of claim 1, wherein the test questions are developed by a test developer system and wherein the method is implemented by a test administration system that is operated by a different entity from the test developer system.

15. The computer-implemented method of claim 1, wherein a session identification is established for the presentation of the test questions by a proctor device and includes a proctor device identifier, and wherein outputting the test question timing data to the proctor device is based on the proctor device identifier.

21. The computer-implemented method of claim 1, further comprising:  
storing a response to the specific test question from the test taker to update the customized alert profile for use in future tests.

22. The computer-implemented method of claim 1, further comprising:  
storing the test question timing data for the specific test question to update the customized alert profile for use in future tests.

51. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the steps of:

administering, from an examination server, a plurality of tests to a plurality of remotely located users on a plurality of user devices and for each test of said plurality of tests that is administered:

establishing a session identification for the administration of the test to the

remotely located user, wherein said session identification includes a user identification, a test identifier, and a proctor device identifier;

identifying presentation of the test questions on a user device of said user devices;

responsive to the presentation of the test questions on said user device,

monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a specific test question;

correlating the test question timing data to the administration of the test to the remotely located user based on the session identification;

wherein the test question timing data is output to said proctor device, based on said proctor device identifier, in response to determining that evidence of greater than expected response time to the specific test question is present; and

generating a customized user alert message after the test question timing data exceeds an alert threshold while continuing to present the specific test question for the remotely located user to answer, wherein the customized user alert message apprises the remotely located user that the elapsed time is excessive for the specific test question, wherein the customized user alert message is periodically presented to the remotely located user based on an alert schedule for the specific test question after at least one time period indicated by the alert schedule, wherein the customized user alert message includes an amount of time remaining to answer the specific test question, a suggested amount of time to spend on the specific test question, and an amount of time allotted to complete all

of the test questions, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, wherein the suggested amount of time to spend on the specific test question is calculated for the remotely located user based on the customized alert profile, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of the specific test question with a capability category of the remotely located user to answer the specific test question, and a plurality of alert thresholds for each of the test questions;

wherein the remotely located user can send instant messages to and receive instant messages from said proctor device associated with said examination server and wherein said proctor device can send instant messages to and receive instant messages from the plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data for the remotely located user during the test.

## **EVIDENCE APPENDIX**

This appeal brief presents no additional evidence.

## **RELATED PROCEEDINGS APPENDIX**

This appeal has no related proceedings.